


HEALTH AND HUMAN SERVICES (HHS) PANDEMIC INFLUENZA PLAN

AT

HONOLULU INTERNATIONAL AIRPORT

RFP No. E01741-08

ATTACHMENT B-3



Once the pandemic has spread outside and within the United States, screening for arriving ill passengers will become less useful and feasible. Although exit-screening of travelers from affected areas ("source control") is likely to be a more effective disease control measure, its effectiveness too will be limited.

To manage arriving ill passengers, public health authorities or quarantine officers should do the following:

- If a suspected case of pandemic influenza is reported aboard an arriving airplane or cruise ship during the early stages of a pandemic, obtain preliminary information about the ill passenger, and advise the captain and crew on patient isolation and infection control.
- If the likelihood of pandemic influenza infection appears high, consider these actions:
 - Notify the airport to mobilize its first responders, and arrange for patient transport and preparation of quarantine facilities.
 - Meet the airplane or cruise ship, perform a medical evaluation of the ill traveler, and assess the risk to public health.
 - Inform the passengers and crew of the situation, and do not allow them to disembark until the evaluation is complete. Procedures for medical management of the patient, passengers, and crew are described in S9-III.C.

b) Travel health precautions and warnings

As the pandemic spreads from country to country, HHS will update country-specific travel notices and post them on the CDC Travelers' Health website (<http://www.cdc.gov/travel/>). Advisories might include:

- Travel Health Precautions that describe steps that can be taken to reduce the risk of infection (e.g., avoiding travel to high-risk settings and communities where transmission is occurring)
- Travel Health Warnings that recommend postponement of nonessential travel

c) Travel-related measures at early stages of a pandemic

When there is limited transmission in other countries and potential for importation of cases into the United States, HHS and state and local health departments might consider the following actions:

- Initiate enhanced disease surveillance at ports of entry.
- Provide guidance on infection control procedures that can be implemented, if needed, on airplanes or ships (e.g., separate the ill passenger from other passengers; provide the ill passenger with a mask or tissues to prevent viral spread via coughing).
- Isolate arriving ill passengers, and quarantine their contacts as necessary.
- Collect information on all arriving passengers if notification is warranted (e.g., for antiviral administration, vaccination, or health monitoring).

d) Travel-related measures at later stages of a pandemic

If the situation worsens overseas and there is extensive and sustained transmission in other countries, HHS and state and local health departments might consider these actions:

- Distribute travel health alert notices to passengers arriving from affected countries (i.e., countries for which health warnings have been issued).
- Post travel health alert notices in airports (e.g., on posters).

- Arrange with airline industry partners to show videos or public announcements about pandemic influenza on airplanes or cruise ships arriving from affected countries.
- Recommend canceling or limiting nonessential travel to affected countries.
- Collect information on all arriving passengers if notification is warranted (e.g., for antiviral administration, vaccination, or health monitoring).

Decisions regarding the implementation of these actions may depend on how widely the pandemic disease has spread within the U.S.

Other potential control measures might include increasing disease surveillance among passengers arriving from affected countries by visually inspecting travelers as they disembark, screening travelers for fever or other influenza symptoms, or administering questionnaires on possible exposures to influenza (e.g., contacts with influenza patients or visits to high-risk areas). Experience during the 2003 SARS outbreak (Appendix 1) suggests that implementation of these measures—which are highly labor-intensive and of unproven benefit—would be especially burdensome during an influenza pandemic. However, it is possible that the transmissibility of a unique pandemic strain may differ from that of seasonal influenza strains or SARS, warranting consideration of alternative measures.

2. Travel out of the United States

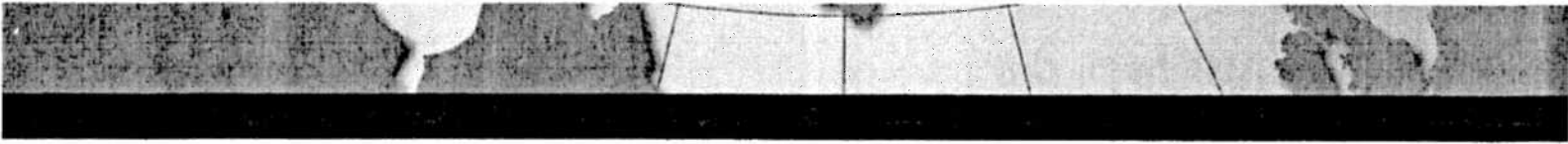
If the level of influenza transmission in the United States presents a high risk for exportation of disease, HHS and state and local health authorities should consider the following actions:

- Distribute travel health warnings to outbound passengers who live in or have visited affected parts of the United States.
- Recommend the cancellation of nonessential travel to other countries from ports of entry in affected parts of the United States.
- Implement pre-departure screening (e.g., temperature screening or visual screening) of outbound travelers.

3. Travel within the United States

- If the level of influenza transmission in a U.S. area is high and if most other areas have not yet been affected, HHS and state and local health authorities might decide to recommend limiting or canceling nonessential travel to that area or to implement increased disease surveillance measures.
- Other containment measures and travel restrictions to slow disease spread within the United States that might be considered include:
 - Distributing travel health alert notices on domestic flights
 - Isolating ill arriving passengers on domestic flights and quarantining passengers and crew, following protocols developed for international flights (see S9-III.C)
 - Closing mass transit systems (e.g., buses and subways; see Supplement 8)
 - Closing interstate bus and train routes

The potential effectiveness of these measures (see S9-IV) and the feasibility of implementing them should be considered in decision-making.



B. De-escalation of travel-related control measures

Decisions to de-escalate control measures related to international travel will be made in consultation with WHO.

1. Outbound passengers

CDC will downgrade a Travel Health Warning for outbound U.S. passengers to a Travel Health Precaution for a given country or area when there is adequate and regularly updated reporting of surveillance data from the area, and limited or no recent instances of cases in the area.

2. Inbound passengers

On arrival, inbound passengers from areas under a Travel Health Warning should be provided with travel health alert notices. Because it is often difficult to determine passengers' points of origin, it may be more practical to continue providing travel health alert notices until Travel Health Precautions have been lifted for all areas.

CDC will remove a Travel Health Precaution when there is adequate and regularly updated reporting of surveillance data from the area and limited or no recent instances of cases exported from the area.



BOX 1. CDC QUARANTINE STATIONS

CDC operates 18 quarantine stations that are responsible for preventing the introduction of infectious diseases of public health importance into the United States. The stations are located at major international airports in Los Angeles, San Francisco, Seattle, Miami, Honolulu, Chicago (O'Hare), New York City (JFK), Atlanta, Houston, El Paso, and Washington, DC. Each station also covers other ports of entry (airports, seaports, land borders) in the region. The stations' quarantine officers evaluate ill passengers who are identified by flight crews, U.S. Customs Service inspectors, or other Federal Inspection Service¹ personnel. Quarantine inspectors also work with regulatory agencies to inspect imported animals and other cargo (http://www.cdc.gov/ncidod/dq/quarantine_stations.htm).

Some ports of entry (with and without quarantine stations) have local physicians on call, and HHS has an ongoing program to establish agreements with local hospitals that accept patients referred by quarantine station staff.

¹ Federal Inspection Service agencies include the Animal and Plant Health Inspection Service (APHIS/USDA), Centers for Disease Control and Prevention (CDC/HHS), Customs and Border Protection (CBP/DHS), and Food Safety and Inspection Service (FSIS/USDA).

BOX 2. TRAVEL-RELATED DEFINITIONS

Travel Notices: Different types of notices for international travelers. During the 2003 SARS outbreak, CDC issued two types of travel notifications about disease occurrences in specific geographic areas. A travel alert, a lower-level notice, provided information on the outbreak and informed travelers about how to reduce their risk of acquiring infection. When the health risk for travelers was thought to be high, CDC issued a travel advisory recommending against nonessential travel to the area. Travel advisories were intended to reduce the number of travelers to high-risk areas and the risk for spreading disease to other areas. The levels of notification have since been revised to include four types of travel notices: In the News, Outbreak Notice, Travel Health Precautions, and Travel Warnings.

In the News: Notification by CDC of an occurrence of a disease of public health significance affecting a traveler or travel destination. The purpose is to provide information to travelers, Americans living abroad, and healthcare providers. "In the News" is issued when the risk for disease exposure is not increased beyond the usual baseline risk for that area, and only standard guidelines are recommended.

Outbreak Notice: Notification by CDC that an outbreak of a disease is occurring in a limited geographic area or setting. The purpose is to provide information to travelers, Americans living abroad, and healthcare providers about the status of the outbreak and to remind travelers about standard or enhanced travel recommendations for the area. Outbreak Notices are issued when the risk for disease exposure is increased but well defined and limited to specific settings.

Travel Health Precaution: Notification by CDC that a disease outbreak of significant scope is occurring in a large geographic area. The purpose is to provide information to travelers, Americans living abroad, and healthcare providers about the status of the outbreak (its magnitude, scope, and rapidity of spread), specific precautions to reduce the risk of infection, and what actions to take if they become ill. Travel Health Precautions are issued when the risk for the individual traveler is increased in defined settings or associated with specific risk factors (e.g., transmission in a healthcare or hospital setting). Travel Health Precautions do NOT recommend canceling travel to the area.

Travel Health Warning: Notification by CDC that a widespread outbreak of a disease of public health concern is expanding outside the area or populations that were initially affected. The purpose is to provide information to travelers, Americans living abroad, and healthcare providers about the status of the outbreak (its magnitude, scope, and rapidity of spread), specific precautions to reduce the risk of infection, and what actions to take if they become ill. Travel Health Warnings recommend canceling nonessential travel to the area because the risk for the traveler is considered high (i.e., there is evidence of transmission outside defined settings and/or inadequate containment). Additional preventive measures may be recommended, depending on the circumstances (e.g., travelers may be requested to monitor their health for a certain period after their return; arriving passengers may be screened at ports of entry). A Travel Health Warning may reduce the volume of traffic to an affected area, which in turn can reduce the risk of disease spread to previously unaffected sites.

Travel Health Alert Notice: Notice with travel-related information and recommendations designed for inbound travelers.

Travel contact: A person on the same conveyance as the ill person.

Close contact: A person who has cared for or lived with the ill person or had a high likelihood of direct contact with respiratory secretions and/or body fluids of the ill person. Examples of close contact with an ill person include kissing or hugging, sharing eating or drinking utensils, talking within 3 feet, and direct touching. Close contact does not include activities such as walking by a person or briefly sitting across a waiting room or office.



APPENDIX 1. RECENT EXPERIENCE WITH TRAVEL-RELATED CONTAINMENT MEASURES: THE 2003 SARS OUTBREAK

During the 2003 global response to severe acute respiratory syndrome (SARS), the control strategy for the United States included issuing travel notifications, distributing Travel Health Alert Notices to travelers arriving from areas with SARS, and conducting visual inspections of arriving travelers to facilitate early identification of imported cases and response to reports of ill passengers. CDC staff met more than 11,000 direct and indirect flights from SARS-affected areas and distributed more than 2.7 million Travel Health Alert Notices to arriving passengers as well as to persons arriving at 13 U.S. land border crossings near Toronto and departing passengers bound for the United States from the Toronto airport. Travel Health Alert Notices informed returning travelers of potential exposure to SARS-associated coronavirus (SARS-CoV). They alerted travelers to the symptoms of SARS-CoV disease and advised them to promptly seek medical attention if symptoms developed. The notices also provided information and instructions for physicians.

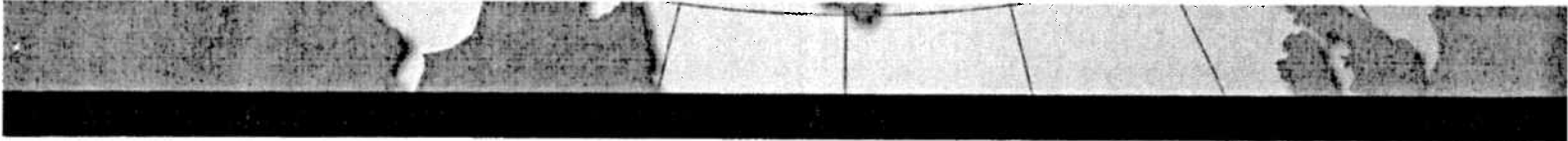
During the SARS outbreak response, CDC quarantine staff met planes reporting an ill passenger to facilitate 1) evaluation of the passenger for possible SARS-CoV disease, 2) collection of locating information on the other passengers, and 3) coordination with federal and local authorities. If the ill passenger was determined to be a possible SARS case, the locating information was forwarded to state and local health departments for contact tracing.

Border and travel-related activities implemented in countries more seriously affected by SARS included pre-departure temperature and symptom screening, arrival screening (asking passengers about travel history and possible exposure to SARS-CoV), "stop lists" (maintaining lists of persons who were possible SARS cases or contacts to prevent them from traveling), and quarantine of travelers returning from other SARS-affected areas.

Lessons learned from this response include the following:

- SARS-CoV can spread rapidly on a global scale through international travel if control measures are not implemented.
- SARS-CoV transmission can be halted through aggressive global measures to educate, detect cases early, effectively isolate cases, and identify, monitor, and quarantine contacts.
- Patients with SARS can transmit infection to other passengers on conveyances and should postpone travel until they are no longer infectious.
- SARS-CoV transmission can occur within the close confines of conveyances. Resulting infections usually represent a failure to recognize symptomatic index cases and their high-risk contacts who should have been prevented from traveling.
- Active follow-up of passengers on conveyances with SARS cases can help prevent further spread by informing passengers of their exposure and providing instructions for monitoring their health and seeking medical evaluation if they become ill.

While these lessons may have some relevance, their applicability to an influenza pandemic is limited by the substantial differences between the epidemiology of transmission of influenza and SARS-CoV. The much shorter incubation period and intergenerational period for influenza compared with SARS-CoV poses enormous time challenges to case isolation, contact tracing, and selective individual quarantine. The possibility of influenza virus transmission by asymptomatic persons makes the ability to effectively implement control measures such as selective quarantine necessarily incomplete and potentially decreases the impact significantly. In addition, with SARS-CoV, peak communicability occurred most often during the second week of illness when cases were extremely ill and often hospitalized; this enabled containment to focus heavily on institutional infection control measures. Influenza virus transmission will occur much earlier in relation to illness onset and is expected to



be preferentially community-acquired rather than nosocomial. Finally, there were fewer than 10,000 documented human cases of SARS worldwide whereas past influenza pandemics have caused symptomatic infection in about 30% of the U.S. population. Thus, in the current U.S. population alone there would be almost 90 million illnesses, and many more persons would have asymptomatic infections. Given the vastly greater number of persons who will be spreading influenza infection within and between communities, approaches to control will inevitably need to be different.

APPENDIX 2. TRAVEL-RELATED INFLUENZA RESPONSE MATRICES

Matrix 1: Inbound Travel

Potential for imported cases in the United States and limited transmission (clusters of human-to-human cases or second-generation spread) in the inbound traveler's location of origin

CDC will distribute travel health alert notices to all arrivals.

Suggested actions:

- Consider enhanced disease surveillance at ports of entry.
- Request information on the ill passenger's symptoms and travel and exposure histories.
- Determine if a state or local public health worker and/or CDC quarantine officer should meet the airplane or cruise ship to further evaluate the ill traveler.
- Provide the crew with guidance on infection control procedures, if needed (e.g., separate the ill passenger as much as possible from other passengers; provide the ill passenger with a mask or tissues to prevent viral spread via coughing).
- Isolate arriving ill passengers, and quarantine their contacts, as necessary.

Imported cases in the United States and extensive transmission in the inbound traveler's location of origin

Additional actions:

- Consider prohibiting all nonessential arrivals.
- Consider active monitoring of all arriving passengers for fever and respiratory symptoms.

Extensive transmission in the inbound traveler's location of origin

Additional actions:

- Prohibit all nonessential arrivals.

APPENDIX 2. TRAVEL-RELATED INFLUENZA RESPONSE MATRICES (CONT.)

Matrix 2: Outbound Travel

Limited transmission (clusters of human-to-human cases or second-generation spread) in the outbound traveler's destination

CDC will issue Travel Health Precautions and Travel Health Warnings for particular destinations, as needed.

Suggested actions:

- Distribute targeted health education messages to outbound travelers.

Extensive transmission in the outbound traveler's destination

Additional actions:

- Arrange with airline industry partners to show videos or air public announcements about pandemic influenza on airplanes and cruise ships.
- Cancel or limit nonessential travel to affected countries.

Extensive transmission in the outbound traveler's destination and in the United States.

Additional actions:

- Consider implementing medical screening at exit points in the United States.



B. Checklist for Pandemic Period

During the first 4 weeks

- ☐ Meet basic needs such as food, shelter, and clothing.
- ☐ Provide basic psychological support (psychological first aid).
- ☐ Provide needs assessments.
- ☐ Monitor the recovery environment (conducting surveillance).
- ☐ Provide outreach and information dissemination.
- ☐ Provide technical assistance, consultation, and training.
- ☐ Foster resilience, coping, and recovery.
- ☐ Provide triage.
- ☐ Provide treatment.
- ☐ Provide psychological and social support services for employees and their families.
- ☐ Address stigmatization issues that might be associated with participation in such services.
- ☐ Implement workforce resilience programs.
- ☐ Work with communications experts to shape messages that reduce the psychological impact of the pandemic.
- ☐ Provide medical, public health, and community partners with educational and training materials.

During subsequent weeks

- ☐ Provide continued outreach, triage, and services.
- ☐ Monitor workforce for signs of chronic or severe psychological distress.
- ☐ Provide assistance in reintegration for workers who were deployed or isolated from work and family.

APPENDIX 3. PSYCHOLOGICAL FIRST AID FOR EMERGENCY RESPONDERS

Along with increased efforts to institutionalize workforce services that support the emotional well-being of responders—both during and after an emergency—a consensus is growing on the usefulness of a set of psychosocial tools and techniques for providing “psychological first aid.” The organizations listed below provide information for those interested in learning more about this topic.

- American Psychiatric Association
www.psych.org/disasterpsych/links/weblinks.cfm
- American Psychological Association (APA) Help Center
www.apahelpcenter.org
- Disaster Epidemiology Emergency Preparedness (DEEP) Center, University of Miami Miller School of Medicine
www.deep.med.miami.edu
- National Center for PTSD, Department of Veterans' Affairs
www.ncptsd.va.gov/
- National Child Traumatic Stress Network
www.nctsnet.org
- Project Liberty
www.projectliberty.state.ny.us/

Resources from HHS agencies include:

- CDC/American Red Cross. Maintaining a healthy state of mind
http://www.redcross.org/preparedness/cdc_english/health.asp
- National Institute of Mental Health (NIMH/NIH/HHS)
Mental Health and Mass Violence: Evidence-Based Early Psychological Intervention for Victims/Survivors of Mass Violence: A Workshop to Reach Consensus on Best Practices. NIH Publication No. 02-5138, Washington, D.C., U.S. Government Printing Office. 2002
- Substance Abuse and Mental Health Services Administration (SAMSHA/HHS)
Disaster Readiness and Response
www.samhsa.gov/Matrix/matrix_disaster.aspx
Disaster Technical Assistance Center. Research listings and fact sheets on self-care
www.mentalhealth.samhsa.gov/dtac/Selfcare.asp
Center for Mental Health Services
Mental Health Response to Mass Violence and Terrorism: A Training Manual. HHS Pub. No. SMA 3959. Rockville (MD); 2004
Guide to Managing Stress in Crisis Response Professions (under development).